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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/775,646	02/05/2001	Susumu Takahashi	202447US2	8312
22850	7590	07/12/2007	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			SINGH, RACHNA	
			ART UNIT	PAPER NUMBER
			2176	
			NOTIFICATION DATE	DELIVERY MODE
			07/12/2007	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Advisory Action</b> <b>Before the Filing of an Appeal Brief</b>	Application No.	Applicant(s)	
	09/775,646	TAKAHASHI ET AL.	
	Examiner	Art Unit	
	Rachna Singh	2176	

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 06/13/07 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

#### AMENDMENTS

3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☒ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☒ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See Continuation Sheet. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☒ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: \_\_\_\_\_.  
Claim(s) rejected: 65-97.  
Claim(s) withdrawn from consideration: \_\_\_\_\_.

#### AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

#### REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_.  
13. ☐ Other: \_\_\_\_\_.

  
07/01/07

Continuation of 3. NOTE: Applicant's amendment introduces new claim limitations citing, "each assembly corresponding to an electronic circuit board" requiring further search and/or consideration by the Examiner.

Continuation of 11. does NOT place the application in condition for allowance because: The majority of Applicant's arguments on pages 14-18 are drawn towards the newly claimed subject matter reciting the assembly corresponds to an electronic circuit board which requires further search and/or consideration by the Examiner. As for the remaining arguments, Applicant claims Tamaki does not teach creating and/or editing structured parts list information (see page 14 of response). Examiner disagrees. Tamaki discloses a production planning system in which a production plan comprises a data storage unit for storing parts list information providing a list of required parts, a parts stock storage section indicating parts stock information which meets the preamble, a system for creating and/or editing structured parts. See abstract and page 6, paragraphs [0117]-[0118].

Applicant further argues on page 14 that Tamaki discloses a parts list storage section but does not disclose that the parts list storage section stores information of different assemblies including parts, and information of a name of the parts. Applicant's amendment now requires the assembly to correspond to an electronic circuit board which requires further search and/or consideration by the Examiner; however, Examiner maintains Tamaki does teach a plurality of assemblies. See pages 1-2, paragraphs [0013], [0016], [0019], and [0021] which discuss a plurality of products in a production planning system. Tamaki discloses a unit for storing production plan information on how to produce particular products along with a parts list storage section for storing the parts list information providing a list of required parts which meets the limitation, an assembly information storage configured to store assembly information for a plurality of assemblies including name of an assembly including a plurality of parts, and a plurality of parts information including name of parts utilized in said assembly. See page 3, paragraph [0033], page 6, paragraph [0118], page 7, paragraph [0127]-[0128] and figures 1 and 3. Examiner notes that a "product" is being interpreted as an "assembly". Furthermore, Examiner is interpreting "a list of parts information" as including the name of the parts used in the product. Tamaki further discloses a parts list storage section for storing the parts list information providing a list of required parts for a product.

On pages 14-15, Applicant further argues Tamaki does not teach "parts information retrieving device" or "assembly information update device". Tamaki discloses retrieving parts information from the production planning information and the parts list information stored in the data storage unit for use in a material resource planning unit which meets the limitation, a parts information retrieving device configured to retrieve a plurality of parts information from said assembly information storage based on input assembly information. Tamaki discloses an adjusting means in which superfluous or deficient parts are identified from the parts stock information and parts information. Superfluous parts are eliminated as are deficient parts and the production planning system is adjusted accordingly. See page 6, paragraph [0117]-[0122] and page 18. The parts list information is generated by the material resource plan unit for calculating the required amount of material resources based on this list. The production system receives production planning information including parts list information from the parts acquisition system. See page 6. The updated structural parts list is provided to the production planning system where it is stored in a data storage unit which meets the limitation, an assembly information update device configured to replace the parts information corresponding to the assembly information with other parts information retrieved from the parts information storage, and to store the replaced parts information corresponding to the assembly information in a memory. See page 18, second column.

Applicant argues Tamaki does not disclose the parts attribute information includes functions of parts. While Tamaki does not expressly state the "parts attribute information including functions of parts", it would have been obvious to a person of ordinary skill in the art at the time of the invention that a list of "required parts" would include the function of such parts because a "required part" would be identified by its use or function in the product. Applicant disagrees that a "required part" has a function; however, Examiner maintains position that a list of required parts would include the function of such parts because a "required part" needs to be identified by its use or function in the product.

Regarding Applicant's arguments directed to the motivation of combining Tegethoff and Tamaki, Examiner disagrees. As stated in the rejections above, it would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate Tegethoff's prediction concerning operation, simulation, etc in a system of Tamaki's structured parts list because early prediction of manufacturing behavior drives design changes which optimize the product's manufacturability and testability, thus improving product quality and reducing cost and utilizing a parts list would help facilitate this prediction. See column 6 of Tegethoff.

On page 16, Applicant argues the newly claimed feature of the assembly corresponding to electronic circuit boards. As indicated above, this new limitation requires further search and/or consideration by the Examiner.

On pages 17-19, Applicant argues there is no basis for the combination because Tegethoff's simulation of an electronic circuit design is irrelevant to the system of Tamaki. Examiner disagrees. It has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Tegethoff is concerned method for manufacturing test simulation in electronic circuit design. Tegethoff teaches a test simulator that simulates a manufacturing test of boards and multichip modules from design concept to aid the designer in selecting trade-offs in design. The methods models fault probabilities for the circuit design based on the components. Tegethoff further discloses the Manufacturing Test Simulator (MTSIM) which is a concurrent engineering simulation tool for manufacturing test, that is, a tool to predict manufacturing test behavior while a product is still being designed. See column 6. MTSIM uses pareto analysis in which a user can evaluate simulation results to determine faults, test coverage, etc. Pareto analysis can be done at three levels of abstraction including individual components, groups of components with the same part number, and groups of components. All part numbers are assigned a category based on level of integration and functionality. See column 11. Furthermore, Tegethoff teaches that he technology of circuit board assembly is evolving to support density demands of many modern circuit designs. Multi-chip modules and twelve-mil pitch surface mount technology (SMT) are frequently used to improve circuit density. SMT chip packages with lead counts of over 1000 are not uncommon. New fabrication processes are used to enable higher circuit densities usually have higher defect rates than older low density fabrication technologies. Tegethoff teaches identifying defects in packaging densities. See columns 1-4.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate Tegethoff's prediction concerning operation, simulation, etc in a system of Tamaki's structured parts list because early prediction of manufacturing behavior drives design changes which optimize the product's manufacturability and testability, thus improving product quality and reducing cost and utilizing a parts list would help facilitate this prediction. See column 6 of Tegethoff.

In view of comments above, the rejection is maintained..